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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,655	02/13/2004	Young Jae Jeon	0465-1148P	5625
2292	7590	09/21/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			MADAMBA, GLENFORD J	
			ART UNIT	PAPER NUMBER
			2151	

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/777,655

Applicant(s)

JEON, YOUNG JAE

Examiner

Glenford Madamba

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07/07/2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This action is in response to amendments filed on July 7, 2005.

Response to Arguments

2. Applicant's arguments filed July 7, 2005 have been fully considered but they are not persuasive.

With regards to independent Claim 1, Applicant argues that the combination of the Hofrichter and Aizu prior arts do not teach the limitations of "repeatedly sending a status request signal to the at least one slave device and receiving one or more response signals from the at least one slave device" and "constructing an operation history database by cumulatively storing operation status data included in each response signal, wherein the microprocessor extracts data from the operation history database when a history inquiry request is received from a user." In other words, and as clarified by Applicant, a slave device outputs one or more response signals in response to a status request signal, from which an operation history database is maintained. The operation history database is a database of operation

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status of the slave devices received in response to the status request signal. Moreover, the data of the operation history database can be extracted in response to a history inquiry request from a user (i.e., the history inquiry request is a request from the user to extract the operation history data). Additionally, Applicant argues that combining Hofrichter with Aizu does not correct for the asserted deficiencies of Hofrichter.

The Office maintains that the limitations of Claim 1 are indeed disclosed by the combination of Hofrichter in view of Aizu. Hofrichter discloses a system and method for identifying, accessing, and managing service applications for use with associated consumer electronic devices in a home network system. A client side process, executed by a client computing system in the home network system operates in conjunction with a server side process executed by a server computing system that is coupled with the client computing system via the Internet. The client side is able to determine device ID information associated with the at least one selected one of the consumer electronic devices in the home network system; determine a home network system configuration profile based on the ID information; and provide the home network system configuration profile to a selected server computing system via the Internet; etc [Abstract]. The configuration profile may be determined based on additional home network configuration parameters, including bandwidth capacity of the home network, a user profile for a user of the home network system, or a history of use of the home network system, etc. [pg. 3, line 32 – pg. 4, line 1]. Hofrichter discloses that the system “reads log files to determine the history of use of the devices in the home network” [pg. 12, lines 22-24]. Hofrichter also clearly discloses embodiments wherein the system

may or may not require a graphical user interface to enable a user to initiate control and performance of device applications associated with the devices in the network.

Specifically, Hofrichter discloses a remote control device for receiving user input [pg. 7, line 31 – pg. 8, line 8]. Thus, Hofrichter clearly provides a means for operation history information to be provided by request or input by a user using the control and display devices of the system.

While Hofrichter does not specify how the log files of the history of the use of the devices are generated (i.e., cumulatively storing operation status data of the devices included in each response signal), the requirement is addressed by Aizu in his invention of an appliance data collecting system. Aizu discloses a controller which holds appliance data acquired from an appliance regularly. The controller transmits appliance data to a display terminal in response to the request of the display terminal [Abstract].

Aizu discloses a display terminal device including a data acquisition unit that decides the time to collect the predetermined data (electric power consumption of each appliance) at regular intervals (or repeatedly) based on the time identified by the time measurement unit and collects the predetermined data when the time comes, thus acquiring the appliance data for each appliance regularly from the control device [col 2, lines 8-20] [col 7, lines 27-56]. Aizu also discloses that the display terminal device (2) has a display function and is equipped with a screen display unit (8). The screen display unit reads out the appliance data on the appliance from the data recording unit and displays the data. Further, the screen display unit has a touch panel and receives

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operations from the user (i.e., selection button to “display of the electricity amount of the previous day”) [col 6, lines 25-34]. Thus, the system described by Aizu provides for the acquisition of appliance data via user input.

With regards to Applicant’s argument that Aizu fails to teach the feature of extracting data from the operation history database when a history inquiry request is received from a user, Applicant is referred to col 19, lines 63 – 67, where Aizu explicitly teaches that operation history information is extracted from the packets received from the controller and acquires user’s operation situation (i.e., history of operations received from the user) and the like. Additionally, Aizu teaches that the operation to exchange operation history information (3rd Embodiment) in the appliance data collecting system is basically the same as exchanging time information (2nd Embodiment), and is basically the same as exchanging electric amount data (1st Embodiment). Hence, it is clear from Aizu’s disclosures that the invention provides a means for accumulating and extracting data of operation history status of the devices (time or electric power data) as well as user operation history of the devices [Figs. 16a/b, 29a/b, and 32a/b].

Claims 2-8, 10-14, and 16-25 depend from the independent claims 1, 9, or 15 directly or indirectly and, thus, stand rejected.

Finally, Applicant argues that alternatively, claims 7 and 14 are distinguishable on their own merit. Specifically, Applicant argues that Aizu does not disclose cumulatively storing operation status data regardless of whether or not a message BLOCK function of the master device is currently activated or not. It has been shown

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that the combined art, and Aizu in particular, discloses cumulatively storing operation status. The limitation of the claims, as written, are met by Aizu's disclosure, because the cumulative storing of operation status by the invention is not negated by the possibility of a BLOCK function being activated, and thus has no real bearing in the storing of appliance operation status by the system.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1- 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hofrichter, WO 02/37217 A2 in view of Aizu et al (hereinafter Aizu), U.S. Patent 6,838,978.

3. Claim 1 discloses a home network system 12 (Figure 1) comprising:

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at least one slave device **30** (**50, 52, 54, 56, 58, 60, 62, 64, 66**) and **36** (**72, 74, 76**);
and a master device **14** operatively connected to the *at least one* slave device, the master device comprising:

a microprocessor operatively connected to the *at least one* slave device **112** (Figure 2, p8, lines 27-29) for repeatedly sending a status request signal to the slave device and receiving one or more response signals from the *at least one* slave device ;

a memory coupled to the microprocessor **118** (Figure 2, p8, lines 17-22) for constructing an operation history database by *cumulatively* storing operation status data of the *at least one* slave device included in each response signal **214** (Figure 4 p12, lines 23-25), wherein the microprocessor extracts data from the operation history database when a history inquiry request is received from a user;

and a display unit coupled to the microprocessor for displaying the extracted operation history data **42** (Figure 1, p8, lines 23-26).

Hofrichter, in his invention, discloses a home network system that determines and provides a home network system configuration profile for at least one selected one of the electronic devices in the system and providing it to a server computing system via the Internet data collecting technology for a home network system. Hofrichter also discloses that the controller (gateway device) is communicatively coupled with each of

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the electronic devices via the home network. It is also communicatively coupled with a display unit (p3, lines 16-22). The gateway determines the device ID information associated with at least one selected one of the electronic devices and determines a configuration profile based on device ID information, and includes history of use of the home network as one the parameters (p3, line 23-26 & p3, line 31 – p4, line 1). He additionally discloses that the gateway is operative to execute remote interactive diagnosis support service application and maintenance support service applications (p8, lines 22-26). Hofrichter does not explicitly disclose in his description for his invention that a status request is repeatedly sent to at least one of the home network devices and a response back is received from the one or more selected devices. Hofrichter does disclose that the history data files are stored in a database or holding unit (p12, lines 22-25). He does not explicitly disclose that the data can then be extracted for display on a display unit.

However, Aizu, in a similar endeavor, discloses an appliance data collecting system and method for a home network system (Aizu: Col 1, lines 48-52) comprising: sending status request signals to a plurality of slave devices, respectively (Aizu: Figure 3, 7, 16A & 17A/B; Col 1, lines 51-59; Col 2, lines 8-21 & Col 7, lines 32-51); receiving one or more response signals sent by each slave device in response to the status request signals (Aizu: Figure 3, 7, 16A & 17A/B; Col 2, lines 8-21 & Col 7, lines 37-43); constructing an operation history database in a memory by accumulatively storing operation status data included in each response signal into the memory **118**

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(Hofrichter: Figure 2; p12, lines 22-25) ; alternatively 5 (Aizu: Figure 18; Col 20, lines 1-6); and extracting data from the operation history database when a history inquiry request is received from a user, wherein the extracted operation history data is displayed on a display unit (Aizu: Col 19, lines 63-67).

It would therefore be obvious to one of ordinary skill in the art at the time of the invention to incorporate the steps described by Aizu for obtaining the operation history information or operational status of the selected home devices, periodically and/or at predetermined times, into Hofrichter's so that collection of the data for history information or operational status of the selected home device(s) can be properly performed for a home network system, such as the home network system disclosed by Hofrichter (Aizu: Col 2, line 5-20).

Claim 9, 15, and 26 are also thus rejected using the same rationale discussed above for Claim 1 as the claims differ only by their statutory category.

4. Claim 2 asserts the home network system of claim 1, wherein the microprocessor identifies the at least one slave device by checking *an identification (ID) of the at least one slave device* (Hofrichter: p3, lines 23-26; p8, lines 27-29).

Claim 16 is also rejected using the same reason discussed above in #4 for Claim 2 as the claims differ only by their statutory category.

5. Claim 6 identifies the home network system of claim 1, wherein the master device is any one of a television (TV) receiver **60**, a refrigerator having a display panel, a personal computer (PC) **50**, and a personal data assistant (PDA) device **52** (Hofrichter: p2, lines 17-23; also p6, lines 28-33).

6. Claim 7 recites the home network system of claim 1, wherein the memory *cumulatively* stores the operation status data included in each response signal, regardless of whether a message BLOCK function of the master device is currently activated or not.

Hofrichter discloses that the history data/log files are stored in a database or holding unit (Hofrichter: p12, lines 22-25).

Claim 14 is also rejected using the same rationale for Claim 7 given that they are identical claims that differ only by statutory category.

7. Claim 3 states the home network system of claim 1, wherein the displayed operation history data includes a list of operations or events performed by *the* slave device during a predetermined period of time.

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Claim 4 cites the home network system of claim 1, wherein the history inquiry request received from the user *includes a user selection of a period of time*, and the displayed operation history data includes a list of operations or events performed by *each of the at least one slave device* during the selected period of time.

Claim 11 points to the television (TV) receiver of claim 9, wherein the displayed operation history data includes a list of operations or events performed by one or more of the plurality of *slave devices* during a predetermined period of time.

Claim 12 references the television (TV) receiver of claim 9, wherein the history inquiry request received from the user includes *a user selection of at least one slave device*, and the displayed operation history data includes a list of operations or events performed *by each selected slave device* during a predetermined period of time.

Claim 13 states the television (TV) receiver of claim 9, wherein the history inquiry request received from the user includes *a user selection of a period of time*, and the displayed operation history data includes a list of operations or events performed *by each slave device* during the selected period of time.

Claim 17 denotes the method of claim 15, wherein the displayed operation history data includes a list of operations or events performed *by the plurality slave devices* during a predetermined period of time.

Claim 22 points to the method of claim 15, wherein the history inquiry request received from the user includes *a user selection of at least one slave device*, and the displayed data includes a list of operations or events performed *by each selected slave device* during a predetermined period of time.

Claim 23 asserts the method of claim 15, wherein the history inquiry request received from the user includes *a user selection of a period of time*, and the displayed operation history data includes a list of operations or events performed *by each slave device* during the selected period of time.

Hofrichter, in his invention, discloses a home network system that determines and provides a home network system configuration profile for at least one selected one of the electronic devices in the system and providing it to a server computing system via the Internet data collecting technology for a home network system (p3, lines 15-22 & lines 23 - p4, lines 1-3). Hofrichter also discloses that system reads log files to determine the history of use of the devices 30,36 (Figure 1) in the home network. The log files include information indicating applications and media contents previously used in the home network system (p12, lines 22-25). Hofrichter does not specifically disclose that the history inquiry or device status request received from the user includes a user selection of a period of time, and the displayed operation history data includes a list of

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operations or events performed by each slave device/s during a predetermined or selected period of time.

However, in his invention, Aizu discloses data collecting technology for home appliances in an electric power line communication system in a home networking system (Aizu: Col 1, lines 6-10 & 48-52). In an embodiment for the invention, Aizu discloses that the invention includes a data recording unit 12c of a display terminal 25, holds information that represents history of operations received from the user through the screen display unit 8, and referred to as "operation history information". The file contains the kinds or the times of the screen referred to in one hour. The display terminal operation history transmission unit reads out the operation history information from the file recorded every startup of the display terminal 25 or every predetermined time (Aizu: Col 19, lines 35-50). The file holding the operation history information or current device status can be configured to obtain the information over any given time period per time unit, according to user preferences (Aizu: Col 7, lines 44-56; Col 19, lines 63-67; Col 20, lines 24-31 and 54-61; Col 21, lines 11-15).

Thus, it would be obvious to one of ordinary skill in the art at the time of the invention to incorporate the periodical/user-selectable time recording/extracting feature of Aizu's invention for obtaining the operation history information or operational status of the selected home devices into Hofrichter's in order to ascertain and /or monitor the historical operational use or status of any of the home devices in the home network

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system according to desired user preferences (i.e. holding 24 hours worth of operation history information in one hour increments for selected slave devices) (Aizu: Col 21, lines 11-15).

8. Claim 5 references the home network system of claim 1, wherein the operation status data included in each response signal includes information indicating initiation or completion of an operation and a corresponding time of the initiation or completion (Aizu: Fig. 23A/B, 29A/B, 7, & 32; Col 19, lines 63-67 & Col 20, lines 24-31 and 54-61)

Claim 19 states the method of claim 15, wherein the operation status data included in each response signal includes information indicating initiation of one or more operations by a slave device and a time of the initiation.

(Aizu: Fig. 7, 23A/B, 29A/B & 32; Col 19, lines 63-67 & Col 20, lines 24-31 and 54-61)

Claim 20 identifies the method of claim 15, wherein the operation status data included in each response signal includes information indicating completion of one or more operations by a slave device and a time of the completion.

(Aizu: Fig. 23A/B, 29A/B, 7, & 32; Col 19, lines 63-67 & Col 20, lines 24-31 and 54-61)

Claims 5, 19, and 20 are thus rejected given the same rationale discussed for the claims in #7 above.

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9. Claim 8 notes the home network system of claim 1, wherein the microprocessor and the at least one slave device are connected together through Power Line Communication (PLC) modems 1 (Aizu: Figure 1; Col 5, lines 38-42).

Claim 8 is rejected using the same rationale discussed above in #3 for Claim 1.

Claim 10 is also rejected for the same reasons cited for Claim 8 given that they are identical claims that differ only by statutory category.

10. Claim 18 references the method of claim 15, wherein the operation status data included in each response signal includes data indicating a current operation status of a slave device.

Claim 21 states the method of claim 15, wherein the operation status data included in each response signal includes information indicating that there is no operation in progress.

Hofrichter discloses that the controller (gateway device) is communicatively coupled with each of the electronic devices via the home network. It is also communicatively coupled with a display unit. The gateway determines the device ID information associated with at least one selected one of the electronic devices and determines a configuration profile based on device ID information, and includes history of use of the home network as one the parameters (p3, line 19-26 & p3, line 32 – p4,

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line 1). He additionally discloses that the gateway is operative to execute remote interactive diagnosis support service application and maintenance support service applications (p8. lines 23-26). Hofrichter does not explicitly disclose in his description for his invention that the diagnosis and maintenance support is based on information indicating the operational status of the slave devices.

Aizu, for his invention discloses that operation history information is extracted from the controller 24 (gateway device) and acquires the user's operation situation (status) and the like at the display terminal 25 from the information (Aizu: Col 19, lines 63-67).

Claims 18 & 21 are rejected using the same rationale discussed for the claims in #7 above.

11. Claim 24. The method of claim 15, wherein the user automatically makes the history inquiry request by turning the power of a master device on (Aizu: Col 19, lines 44-53).

Claim 24 is rejected using the same rationale discussed for the claims in #7 above.

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12. Claim 25. The method of claim 15, wherein the user manually makes the history inquiry request by activating a corresponding function key provided within the master device (Aizu: Col 6, lines 16-34).

Claim 25 is rejected using the same rationale discussed for the claims in #7 above.

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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1. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenford Madamba whose telephone number is 571-272-7989. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3932. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Glenford Madamba
Examiner
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A handwritten signature in black ink, appearing to read "Zarni Maung", with a long horizontal flourish extending to the right.

ZARNI MAUNG
SUPERVISORY PATENT EXAMINER